

1/2

**RetroGram 1.4**

New Patient

**Patient Details** | **Laboratory Information** | **HIV Therapy Decision Support** | **Help** | **Exit**

Patient ID: abc 123

Date of Sample: 06/09/1967

Current Treatment:

- 1. amprenavir
- amprenavir/r
- indinavir
- indinavir/r
- lopinavir/r
- nelfinavir
- ritonavir
- sacquinavir
- sacquinavir/r
- 2. abacavir
- didanosine
- lamivudine
- stavudine
- zalcitabine
- zidovudine
- 3. delavirdine
- efavirenz
- nevirapine

Fig. 1

**RetroGram 1.4**

Patient ID: abc 123

**Patient Details** | **Laboratory Information** | **HIV Therapy Decision Support** | **Help** | **Exit**

**HIV Substitutions** | **Viral Load / CD4 Information**

Sample Type: RNA

Protease: 10M;82A

RT: 215Y;103N

RT 68-70 Insertion: Absent

Viral Load / CD4 Information:

- Plasma VL: 100000 copies/mL
- CD4: 260 cells/mm<sup>3</sup>
- Protein: 650 copies/ug DNA

Load file...

Fig. 2

2/2

2/2

7

6

8

RetoGram 1.4

New Patient

Patient ID: abc 123

Print

Save

Help

Exit

Patient Details

Laboratory Information

HIV Therapy Decision Support

Legend

A

B

C

D

BB

Double click a drug name to view the available references supporting its ranking

Interpret Substitutions

Class	Current Treatment	New Treatment
PIs		
amprenavir	A	
amprenavir/rtv	A	
saquinavir	A	
saquinavir/rtv	A	
indinavir/rtv	B	
lopinavir/rtv	B	
nelfinavir	B	
indinavir	C	
ritonavir	C	
Lopinavir is co-formulated with ritonavir. No linevir; no data on boosting is available.		
NRTIs		
abacavir	A	
didanosine	A	
lamivudine	A	
zalcitabine	A	
stavudine	B	
zidovudine	C	
NNRTIs		
delavirdine	D	
efavirenz	D	
nevirapine	D	

Fig. 3

Literature references supporting this ranking for zidovudine :

Mayers DL, Japour AJ, Arduino JM, Hammer SM, Reichman R, Wagner KF, Chung R, Lane J, Crumpacker CS, McLeod GX, et al. Dideoxynucleoside resistance emerges with prolonged zidovudine monotherapy. The RV43 Study Group. *Antimicrob Agents Chemother*. 1994; 38:307-314.

Hooker DJ, Tachedjian G, Solomon AE, Gursinghe AD, Land S, Birch C, Anderson JL, Roy BM, Arnold E, Deacon NJ. An in vivo mutation from leucine to tryptophan at position 210 in human immunodeficiency virus type 1 reverse transcriptase contributes to high-level resistance to 3'-azido-2'-deoxythymidine. *J Virol* 1996; 70:8010-8018.

Jellinger, R. M., R. W. Shafer, and T. C. Merigan. 1997. A novel approach to assessing the drug susceptibility and replication of human immunodeficiency virus type 1 isolates. *J. Infect. Dis.* 175:3,561-566.

Kellam P, Boucher CA, Larder BA. Fifth mutation in human immunodeficiency virus type 1 reverse transcriptase contributes to the development of high-level resistance to zidovudine. *Proc Natl Acad Sci U S A* 1992; 89:1934-1938.

OK

Fig. 4